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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,444	06/26/2001	Kazuhiro Tsujita	Q65160	9702
7590 04/19/2007 SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W.			EXAMINER	
			RAMIREZ, JOHN FERNANDO	
Washington, DC 20037-3202			ART UNIT	PAPER NUMBER
			3737	•
				·
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		04/19/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
	09/888,444	TSUJITA, KAZUHIRO			
Office Action Summary	Examiner	Art Unit			
	John F. Ramirez	3737			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with	the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 136(a). In no event, however, may a reply will apply and will expire SIX (6) MONTHS e, cause the application to become ABANI	TION. be timely filed  From the mailing date of this communication.  DONED (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on <u>02 A</u>	pril 2007				
	s action is non-final.				
· <u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-16 is/are pending in the application	l.				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-16</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	or election requirement.				
Application Papers					
9) The specification is objected to by the Examine	or.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Ex	xaminer. Note the attached O	ffice Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 11	19(a)-(d) or (f).			
a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Burea	, , , ,	and the same			
* See the attached detailed Office action for a list	of the certified copies not rec	ceivea.			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Sum				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)		lail Date mal Patent Application			
Paper No(s)/Mail Date	6) Other:	• •			

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#### **DETAILED ACTION**

## Response to Arguments

Applicant's arguments, see remarks, filed 04/02/07, with respect to claims 1-3, 5 and 12 under 103 rejection have been fully considered and are persuasive.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Therefore, the following new office action is provided in order to expedite the prosecution of this application.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faupel et al. (US 6,975,899) in view of Hattori (US 4,422,457).

The Faupel et al. patent teaches all the limitations of the claimed subject matter except for mentioning specifically a contact detecting means for detecting that the distal end of excitation light emitting means has come into contact with the target tissue, and the distance parameter detecting means for detecting a parameter correlating the distance between the distal end of excitation light emitting means and the target tissue.

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However, a fluorescent-light image obtaining apparatus including a contact detecting means for detecting that the distal end of excitation light emitting means has come into contact with the target tissue, and the distance parameter detecting means for detecting a parameter correlating the distance between the distal end of excitation light emitting means and the target tissue are considered conventional in the art as evidenced by the teachings of Hattori (US 4,422,457) (see abstract, col. 1, lines 55-68, col. 3 line 46 - col. 4 line 17, col. 5, lines 12-38).

Accordingly for a person of ordinary skill in the art, modifying the method disclosed by Faupel et al., with a contact detecting means for detecting that the distal end of excitation light emitting means has come into contact with the target tissue, and the distance parameter detecting means for detecting a parameter correlating the distance between the distal end of excitation light emitting means and the target tissue as taught by Hattori would have been considered obvious in view of the proven conventionality of these enhancements.

Claims 4, 6-11, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faupel et al. in view of Cline et al. (US 6,462,770).

Faupel et al. teaches all the limitations of the claimed subject matter except for mentioning specifically a fluorescent light image system wherein the parameter is based on the pixel values of the entire image or a predetermined portion of a fluorescent-light image obtained by the fluorescent-light image obtaining means, wherein the parameter is the light intensity of the normal-image obtained by the normal-image obtaining

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means, wherein the parameter is based on the pixel values of the entire image or a predetermined portion of a normal-image obtained by the normal-image obtaining means, further comprising reference-light emitting means for projecting a reference-light onto the target tissue, and reflected-light image obtaining means for obtaining a reflected-light image reflected from the target tissue upon irradiation thereof by the reference-light, wherein said parameter is based on the light intensity of the reflected-light image obtained by the reflected-light image obtaining means, wherein said excitation light emission controlling means causes the emission of the excitation light from the excitation light emission controlling means to stop, wherein said excitation light emission controlling means causes the excitation light from the excitation light emitting means to be emitted at an intensity below a predetermined value, and the strength of the excitation light is controlled at the same time as the strength of the illuminating light.

However, a fluorescent light image system wherein the parameter is based on the pixel values of the entire image or a predetermined portion of a fluorescent-light image obtained by the fluorescent-light image obtaining means, wherein the parameter is the light intensity of the normal-image obtained by the normal-image obtaining means, wherein the parameter is based on the pixel values of the entire image or a predetermined portion of a normal-image obtained by the normal-image obtaining means, further comprising reference-light emitting means for projecting a reference-light onto the target tissue, and reflected-light image obtaining means for obtaining a reflected-light image reflected from the target tissue upon irradiation thereof by the reference-light, wherein said parameter is based on the light intensity of the reflected-

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light image obtained by the reflected-light image obtaining means, wherein said excitation light emission controlling means causes the emission of the excitation light from the excitation light emitting means to stop, wherein said excitation light emission controlling means causes the excitation light from the excitation light emitting means to be emitted at an intensity below a predetermined value, and the strength of the excitation light is controlled at the same time as the strength of the illuminating light. are considered conventional in the art as evidenced by the teachings of Cline et al. (see abstract, see claims 2, 9, 11, col. 3, lines 11-36, col. 4, lines 39-60, col. 7, lines 32-55).

Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Faupel et al., with the above discussed enhancements would have been considered obvious because such modifications would optimally adjust the brightness of autofluorescence images and that will objectively quantify the degree of abnormality of the tissue.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F. Ramirez whose telephone number is (571) 272-8685. The examiner can normally be reached on (Mon-Fri) 7:30 - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**JFR**